

## 7.

The Saturnioidea (Moths) of Kartabo, British Guiana,  
and Caripito, Venezuela.<sup>1</sup>

HENRY FLEMING

*Entomologist, Department of Tropical Research, New York Zoological Society.*

(Plate I; Text-figures 1-2.)

[This contribution is a result of various expeditions of the Department of Tropical Research of the New York Zoological Society to British Guiana and to Venezuela, all under the direction of Dr. William Beebe. The Guiana expeditions were made during the years 1909, 1916, 1917, 1919, 1920, 1921, 1922, 1924 and 1926. The expeditions were arranged so that each month of the year is represented in the collections. The Venezuelan expedition, in 1942, during which field work was carried on from February 19 to September 2, was sponsored by grants from the Committee for Inter-American Artistic and Intellectual Relations and from four trustees of the Zoological Society, George C. Clark, Childs Frick, Laurance S. Rockefeller and Herbert L. Satterlee, and by invaluable assistance from the Standard Oil Companies of New Jersey and Venezuela.]

## INTRODUCTION.

This is the second of a series of papers on the Lepidoptera collected at Kartabo, British Guiana, and Caripito, Venezuela, by expeditions of the Department of Tropical Research of the New York Zoological Society.

A total of fifty-six species of Saturnioidea was captured at Kartabo and Caripito. Thirteen of the thirty-five species taken at Kartabo have not previously been reported from British Guiana and twenty-two of the twenty-nine species from Caripito are new to Venezuela. Only eight of the species collected were taken at both localities although Kartabo and Caripito are approximately only four hundred miles apart and are both within the range of many of the species. While the Kartabo collection is the result of a greater amount of time in the field, this was compensated at Caripito by excellent light collecting conditions.

The most significant ecological difference between Kartabo and Caripito seems to be the nature of the rainfall. Caripito is characterized by having one intensely dry season, so dry, indeed, that the jungle reminds one of a temperate autumn with its falling and

crackling leaves; and a very rainy wet season which renders most of the parched jungle impassable because of ankle to knee-deep residual water. Almost the only uninundated areas are the ridges. Kartabo, on the other hand, while having a greater average rainfall, 100 inches compared with Caripito's 80 inches, has the precipitation broken into four seasons in such a manner that sufficient rain falls in the dry periods to keep the jungle flora fresh, while it is moderate enough in the wet seasons so that the jungle does not flood. The alternate parched and flooded condition of the Caripitan jungle must certainly have a profound effect on those insects which spend part of their life cycle on or beneath the ground, or whose food plants may suffer from insufficient moisture.

For maps and a detailed account of the ecology of Kartabo and Caripito, see Beebe, *Studies of a Tropical Jungle; One Quarter of a Square Mile of Jungle at Kartabo, British Guiana. Zoologica*, Vol. VI, pp. 1-193 (1925) and *Physical Factors in the Ecology of Caripito, Venezuela. Zoologica*, Vol. XXVIII, pp. 53-59, (1943).

My thanks go to Dr. William Beebe who offered many valuable and helpful suggestions during the writing of this paper and who corrected the manuscript, and to Mr. William Comstock of the American Museum of Natural History for his many favors.

All types are in the collection of the Department of Tropical Research unless otherwise stated.

## OXYTENIDAE.

No representatives of this family were taken at Caripito. This locality, however, is within the range of the five species listed below which were captured at Kartabo, and one of them, *Oxytenis modestia*, has been reported from Trinidad, only a little over one hundred miles away.

*Asthenidia geometraria* (Felder).

Two specimens were taken at Kartabo on December 12.

<sup>1</sup> Contribution No. 707. Department of Tropical Research, New York Zoological Society.

***Asthenidia lactucina*** (Cramer).

One specimen captured at Kartabo on October 12.

***Asthenidia stricturaria*** (Hübner).

Two specimens collected at Kartabo on July 18 and December 8.

***Oxytenis angulata*** (Cramer).

One male taken at Kartabo on June 6.

***Oxytenis modestia*** (Cramer).

One captured on June 26 (No. 22318) and other specimen on June 29. These specimens were captured at Kartabo in different areas.

## SATURNIDAE.

(Saturnidae and Hemileucidae of Bouvier).

Only ten species of Saturnidae were collected at Caripito whereas twenty-two were captured at Kartabo. Three species were common to both localities.

***Rothschildia aurota*** (Cramer), subspecies?

One specimen taken at Caripito on July 1. This specimen closely resembles a specimen I have seen from Ecuador, and both specimens run to *Rothschildia aurota andensis* Rothschild in Bouvier's key (*Étude des Saturnioïdes Normaux. Famille des Saturniés. Mém. Mus. Nation. Hist. Nat.*, N.S., tome 3, pp. 288-289, 1936). It seems unlikely at the Caripitan individual should be *andensis*, since the latter is a sub-tropical form described from southeastern Peru. Furthermore, the Caripitan specimen differs in being a somewhat lighter chestnut-brown and having the bluish line which runs through the lilac area waved instead of straight. I have not seen a specimen resembling *Rothschildia aurota venezuelensis* Bouvier which as described from Merida, Venezuela. I include from the key that the specimen from Caripito differs in having the hyaline spots larger and touching the median band.

***Rothschildia betis betis*** (Walker).

Four specimens captured at Caripito on the following dates: May 21, June 5, July 21, and August 10. This species was not taken at Kartabo and is the first record for Venezuela.

***Rothschildia erycina erycina*** (Shaw).

One specimen captured in 1920 at Kartabo where it would be expected to occur though had not as yet been reported. It was not taken at Caripito but probably occurs there since it has been reported from Trinidad.

***Rothschildia lebeaui lebeaui*** (Guérin-Ménéville).

This species was taken occasionally at Kartabo. Three specimens were taken in 1920, two of them on December 1 and one

on December 8, and two specimens in May of 1924 (24209). This species was not collected at Caripito.

***Automeris abas abas*** (Cramer).

Five specimens taken at Kartabo, two on June 12, two on June 29 and one on September 5. This species ranges from Brazil to Honduras but was not taken at Caripito.

***Automeris cinctistriga*** (Felder).

Two specimens captured at Caripito, one on March 3 and the other on March 7, and one at Kartabo on September 27. This is a new distribution record for both British Guiana and Venezuela as the species has been reported only from Colombia north to Mexico.

***Automeris cypria vala*** (Kirby).

A common species at Kartabo which probably flies all year. Nine specimens captured on the following dates: January 12, March 3, May 1, June 12, June 15, July 1, July 11, August 2 and September 12. This is a new record for British Guiana as it has only been reported from Surinam.

***Automeris egeus egeus*** (Cramer).

Three specimens (24256) captured at Kartabo in May. It has been recorded from Trinidad so probably will be found in Venezuela.

***Automeris illustris illustris*** (Walker).

One individual taken at Kartabo. This species is common throughout Brazil and has been reported from Surinam. This is the first record as far north as British Guiana.

***Automeris irmina*** (Cramer).

Six specimens taken at Kartabo as follows: one specimen on January 4, February 10, May 15, December 7, and two on December 8. This form is distributed from Panama to the Amazons and Ecuador.

***Automeris junonia*** (Walker).

Collected at Caripito on May 1, May 4 and July 28. A new record for Venezuela as well as extending the range of the species across northern South America. Formerly, it was thought to occur only from Colombia north to Mexico.

***Automeris liberia liberia*** (Cramer).

Collected at Caripito on May 22 and August 25 and at Kartabo on March 11 and August 21. This is a common species widely distributed in South America.

***Automeris nausica*** (Cramer).

One specimen taken at Caripito on May 14. This species occurs from Mexico to Bolivia and the Guianas.

**Automeris pallens** Conte.

specimen taken at Kartabo on June 4  
 another on December 1. Judging by the  
 sure, the range of this species is re-  
 corded to British Guiana.

**Automeris pictus** Conte.

specimen with no date forms a new  
 record for British Guiana.

**Automeris pyrromelas** Walker.

Two specimens taken at Kartabo on De-  
 cember 11. Although this species occurs from  
 Bolivia to Brazil, this is the  
 first record from British Guiana.

**Automeris surinamensis** Kirby.

Two specimens taken at Kartabo on January 1 and  
 May 4 (No. 127). It has been recorded  
 from the Guianas previously.

**Hylesia canitia** (Cramer).

Two specimens taken at Kartabo on the  
 following dates: February 1, May 29, June  
 20, July 19 and July 24. The species  
 known from Venezuela and the Guianas.

**Hylesia indurata** Dyar.

Two specimens captured at Kartabo on  
 the following dates: May 29, June 2, June 26,  
 July 19. The original type material came  
 from the Guianas.

**Hylesia mystica** Dyar.

One specimen at Kartabo in May (24249).  
 This species was described from material  
 found in Trinidad and the Guianas.

**Hylesia ochrifex** Dyar.

One specimen at Kartabo in May. This is  
 a new record for British Guiana, as the spe-  
 cies has been reported only from Peru.

**Hylesia praeda** Dognin.

One specimen on March 14 and another  
 at Kartabo. The species occurs in  
 Guiana, Ecuador, Guianas and Brazil.

**Hylesia** sp.?

Kartabo specimen very badly rubbed  
 and indeterminate.

**Hylesia** sp.?

Two specimens from Caripito, apparently  
 the same species, badly rubbed and undeter-  
 minable.

**Lonomia achelous** (Cramer).

One specimen taken at Caripito on May 2.  
 This is a valuable new record for Venezuela,  
 previously it has only been reported from  
 Ecuador and Bolivia.

**Dirphia eumedide** (Cramer).

Two specimens taken at Kartabo, one on  
 May 10 and another later in the year. It

has been found from Panama to Ecuador  
 and Surinam, but this is the first record  
 from British Guiana.

**Dirphia radiata** Dognin.

One specimen taken in May at Kartabo.  
 This species has been reported only from  
 French Guiana, so this is another new re-  
 cord for British Guiana.

**Dirphia speciosa** (Cramer).

One specimen collected at Caripito on  
 April 14, and two specimens at Kartabo, the  
 first in May and the second on June 26. This  
 species is distributed from Costa Rica to  
 Bolivia and the Guianas. This is the first  
 time it has been reported from Venezuela.

**Dirphia tarquinia** (Cramer).

An individual taken on June 15 at Kartabo.  
 This species occurs from the Amazon region  
 to Venezuela, but this is the first actual re-  
 cord from British Guiana.

**Molippa simillima** Jones.

Two males captured at Caripito on March  
 20 and April 10 and a female on June 16.  
 This species occurs from Mexico to the Gui-  
 anas.

## SYSSPHINGIDAE.

Nineteen species of Syssphingidae were  
 collected at Caripito and seven at Kartabo.  
 Of these, only two species were taken at  
 Kartabo that were not found at Caripito. I  
 am not able to give an explanation of why  
 so few were collected at Kartabo nor why,  
 with the exception of two species, *Rhescyntis*  
*armida* and *Syssphinx molina*, all the speci-  
 mens collected at Caripito were males.

**Machaerosema hippodamia hippodamia**  
(Cramer).

Four specimens collected at Caripito on  
 April 9, May 3, May 4 and May 13, and at  
 Kartabo one specimen taken on August 31.  
 This species has been reported from British  
 Guiana to Argentina. The Caripitan cap-  
 tures represent a new record for Venezuela  
 as well as extending the range of the species  
 to northern South America.

**Rhescyntis armida** (Cramer).

This is a very common species at Caripito  
 in May and June. Six males captured on  
 the following dates: April 3, May 2, June 1,  
 June 7 and June 15. Six females, two of  
 them much smaller than the rest of the  
 series (form *erythrinae* Fabricius), cap-  
 tured on the following dates: May 2, May  
 19, June 2 (2 specimens), June 7 and June 8.  
 One specimen was taken at Kartabo. This  
 species ranges from Mexico to south Brazil  
 but has not heretofore been recorded from  
 Venezuela or British Guiana.

*Rhescyntis beebei*, new species.

(Pl. I, Fig. 1).

The wing shape is similar to *Rhescyntis armida* (Cramer) with the produced apex and somewhat sinuous outer margin. The wing length (measured from the base of the wing to the apex) is 69 mm.

The head is dark reddish-brown with light brownish-yellow bipectinate antennae. The thorax is mostly light reddish-brown with the femurs of a similar color; the tibiae are dark reddish-brown and the tarsi bright orange-yellow with the terminal spurs surrounded by dark reddish-brown hair.

The basal two-thirds of the forewing below the cubital stem are composed of light brown hair, and above this of gray scales irrorated with brown flecks. The transverse anterior line is brown and runs from the radial stem to the inner margin. It is almost straight to a point a little below the cell, then curved proximally at about 120°. The discal bar is the same color. The transverse postmedian band is of a contrasting deep, rich brown with no line separating the band from the gray and light brown proximal area as in *R. armida* and allies. The distal margin of the band is very strongly produced at the apex of the wing and is also produced into round lobes at cells  $M_3$  and  $Cu_1$ . The proximal and distal margins of the band converge below vein  $Cu_1$ , making the band narrow at the inner margin. An interrupted line follows the distal margin of a blackish-brown color flecked with bluish-white scales. At the apex of the wing the line becomes brown and runs through the base of two purplish-vinaceous figures. There is no white scaling between the line and the transverse postmedian band at any point. A broad rufous line rises from the band a little below vein  $M_1$  and curves evenly to the apex of the wing. There is a brownish-black spot 7 mm. before the apex of the wing and two streaks of whitish scales which run along cells  $R_5$  and  $R_6$  to the apex of the wing.

The hindwing is tailed as in the males of *Rhescyntis armida*, except that the tails are more prominent. The basal two-thirds of the hindwing are composed of light brown hair similar to the inner margin of the forewing. The discal bar is brown and is continued below the discocellulars to the postmedian band which is concolorous with the postmedian band of the forewing. The proximal margin of the band is almost straight from the inner margin to vein  $R_5$  where it bends distally to the costal margin. No line is present on the proximal border of the band, but a fine dark brown line encloses the distal border. A narrow light brown band follows and is confined distally by an irregular blue-black line flecked with bluish-white scales. The terminal band is the same color as the

corresponding band in the forewing, but with no markings.

The underside of the basal two-thirds of the forewing is gray. The transverse anterior line is absent, but the brown discal bar is present. The transverse postmedian band is reddish-brown proximally but grades into a grayish-brown, irrorated with blackish-brown specks, and terminated by a blackish-brown line of varying width. From the inner margin to vein  $Cu_2$ , between the transverse postmedian band and the subterminal line, a narrow brownish-white band is present that is not evident on the upperside of the wing. The underside of the hindwing is almost the same as the upperside, but differs in two respects. First, the narrow band proximal to the subterminal line is absent except from the inner margin to a point mid-way between veins  $Cu_1$  and  $Cu_2$ . Here, the band is only slightly lighter than the postmedian band, but the scaling of the subterminal line is much broader and darker than in the rest of its course on the wing. Secondly, a purplish-vinaceous half-moon rests on the subterminal line in cell  $R_5$  with its round side in the terminal band. The terminal band is light brown from the costal margin to vein  $M_1$ , while from  $M_2$  to the inner margin is reddish-brown.

The most distinctive feature of the male genitalia is a projection on the cephalad part of the aedeagus shaped like a "Y".

This species is named in honor of Dr. William Beebe, Director of the Department of Tropical Research.

Material: One ♂ holotype taken at Caripito, Venezuela, on May 19 (Cat. No. 42486).

*Rhescyntis mossi* Jordan.

One individual taken at Kartabo on June 30. This is the first record for British Guiana. It has not been reported before outside of the Amazon region.

*Dysdaemonia boreas* (Cramer).

Another common species at Caripito, appearing soon after the rains commence. Although this species is found from Mexico to Argentina, this is the first record for Venezuela. Eleven specimens were captured as follows: May 2, May 12, May 13, May 16, May 20, May 21 and four specimens on May 25.

*Dysdaemonia tamerlan* Maassen.

One specimen captured at Caripito on May 13. Reported from Colombia, Guianas and Brazil but not previously recorded from Venezuela.

*Citheronia laocoon lobesis* Rothschild.

A very common species at Caripito. Twelve specimens taken on the following dates: April 30, May 11, May 13 (3), May 14, May 16 (2), May 17 (2), June 1 and

August 21. This subspecies was described from Costa Rica and has previously been reported from Venezuela.

*Citheronia mexicana aroa* Schaus.

Four specimens were captured at Caripito, one on each of the following dates: May 19, May 20, May 22 and June 1. This species is found from Arizona to south Brazil with this particular subspecies described from Venezuela and reported from Honduras.

*Citheronia phoronea phoronea* (Cramer).

One female taken at Kartabo in 1920. The species has been reported from the Guianas and Brazil and I have seen two specimens from Panama in the collection of the American Museum of Natural History.

*Citheronia phoronea minutus*, new subspecies.

(Pl. I, Fig. 2).

The wing shape is similar to *Citheronia phoronea phoronea*, but the moth is much smaller. The seven specimens range from 40 mm. to 44 mm. wing length, with an average of 42 mm., whereas the wing length of the nomenclatural type ranges from 50 mm. to 53 mm.

The purple drab and the yellow color in the forewings are lighter than in *C. p. phoronea*. In the hindwing the discal cell and cells  $R_1$  and  $R_5$ , to a point a little beyond the middle of the wing, are light creamy yellow. A patch of light yellow of variable size extends along the inner margin of the hindwing. The remainder of the wing is purple drab except for a lunulate subterminal line. The yellow markings of the hindwing are bright creamy yellow rather than light orange-yellow as in *C. p. phoronea* in which the yellow tones spread over more of the wing; the lunulate subterminal line is sharp in *minutus* whereas in *phoronea* the yellow color diffuses towards the base, particularly in the region of the median veins. The underside of the hindwing is bright creamy yellow with the veins heavily marked with purple drab.

The material used for comparison was borrowed from the American Museum of Natural History and consisted of specimens from Santa Catharina, Brazil, and two specimens from Panama. Some differences seem to exist between the Panamanian and Brazilian specimens—mostly, in that the ground color of the forewing of the Panama specimens is brown drab, but the characters given above appear to be confined to *minutus*. The small size, the large contrasting dark area of the hindwing, and the heavily marked veins on the underside of the hindwing distinguish *minutus*.

Material: A total of 7 specimens taken as follows: Caripito, Venezuela: June 1, 1 ♂ holotype (Cat. No. 42473); June 1, 4 ♂ paratypes (Cat. Nos. 42473, 42476, 42477,

42478); May 17, 1 ♂ paratype (Cat. No. 42479); May 21, 1 ♂ paratype (Cat. No. 42475). All of the above specimens were collected at light.

Paratypes Nos. 42474 and 42479 are in the collection of the American Museum of Natural History. Paratype No. 42476 is at the Museo de Ciencias Naturales, Caracas

*Eacles magnifica approximans* Bouvier.

Four males were captured at Caripito on May 11, May 22, May 23 and May 25. This subspecies was described from Guyana, Venezuela.

*Eacles penelope penelope* (Cramer).

One female without a date label taken at Kartabo. Five males captured at Caripito, one on April 19 and the remaining four specimens on May 13. The subspecies is reported only from the Guianas so this represents a new record for Venezuela.

*Eacles tyrannus* Draudt.

One specimen caught on May 14 at Caripito. This rare species has only been reported previously from western Colombia, so this capture represents a new Venezuelan record.

*Syssphinx anthonilis anthonilis*  
(Herrich-Shäffer).

A common species about the lights at Caripito in July. Thirteen specimens captured as follows: July 11 (2), July 12 (6), July 14 (3) and one specimen each on July 15 and July 16. This is the first record from Venezuela. It has been reported from Brazil with a race, *analis* (Rothschild), in Peru and southern Colombia.

*Syssphinx arpi* (Schaus).

One specimen taken at Kartabo in 1920 and one May 13 at Caripito. This species has been reported only from Brazil, so it is new to both British Guiana and Venezuela.

*Syssphinx carisma* Schaus.

One specimen captured at Caripito on June 3. A new distribution record for Venezuela as it has not been mentioned in the literature as occurring outside of British Guiana.

*Syssphinx comstocki*, new species.

(Pl. I, Fig. 4; Text-figs. 1A, B).

The wing length of the specimens ranges from 32 to 37 mm. with an average length of 34 mm. The wing shape is similar to *Syssphinx flavosignata* and allies.

This species has the same general appearance as *Syssphinx flavosignata* with which it is confused in collections. Forewing with basal area creamy yellow bordered by a narrow purplish anterior band which is concave basally and distally blends into a yellowish-orange median band. The median band ter-

minates at a dark brown line which commences at the costal margin just anterior of the apex of the wing and is arched in the direction of the base of the wing to a point approximately three-fourths out the inner margin. The median band is marked with brown striae and contains as many as three silvery white spots outside the lower corner of the discal cell. The silvery spot in cell  $Cu_1$  is never absent, the spot in cell  $M_3$  is rarely absent and the spot on the lower discocellular vein is frequently absent. The grayed purple terminal band is bound by the dark post-median line and the margins of the wing, and encompasses a creamy yellow pattern commencing at vein  $M_3$  and continuing to the inner margin.

The discal region of the hindwing is yellowish-brown; the costal region and three-fourths out the inner margin are darker and of a brownish-sepia color. A brownish-sepia postmedian line of variable distinctness separates the medial area from the distal area of the wing.

The purplish color on the underside of the wings is usually more intense than in *Syssphinx f. flavosignata* (Walker) in which the purple is mixed with brown. The veins of *flavosignata* are also more heavily marked and darker.

The ground color of the abdomen is light brown. Dorsally, the conjunctivae are filled with purplish-brown hairs, but dorso-laterally, they cover the whole of the metameres caudad of the fifth metamere. Ventrolaterally, there is a light brown streak along the length of the abdomen with the ventral surface entirely purplish-brown. In *flavosignata* the dark hairs of the abdomen are confined to the conjunctivae or one-half of the metamere except ventrally. In other words, the dorsal half of the abdomen appears banded in *flavosignata* while in *comstocki* the dorso-lateral brown hairs form a longitudinal line which contrasts so with the mid-dorsal area as to give the latter the effect of a light orange-brown streak.

The male genitalia possess the best characters for separating the species from *flavosignata*. In the following table the most salient genitalic differences between the two species are listed.

#### *Syssphinx flavosignata*.

Clasper with the ventro-posterior process stubby, broad and hooked in a dorsal direction along the posterior margin of the clasper.

Harpe<sup>2</sup> with the spatulate-like end laterally pointed.

The two lobes on the dorso-posterior part of the uncus not pronounced and with only a shallow depression between them.

Median ridge of the uncus divided linearly into two symmetrical parts and armed with setae-like spines.

The two processes at the anal end of the aedeagus with one of the processes much shorter than the other.

#### *Syssphinx comstocki*

Clasper with the ventro-posterior process acuminate and broadly curved toward the inner face of the clasper.

Harpe acuminate with the end usually curved.

The two lobes large and very pronounced with a deep depression between them.

The ridge undivided and armed with large tooth-like spines.

One anal process thin and almost as long as the broad process.

*Syssphinx flavosignata* was described from Rio de Janeiro and is distributed from southern Brazil to northeastern Venezuela. *Syssphinx comstocki* is found from northeastern Venezuela to Central America. The close relationship between *flavosignata* and *comstocki* is emphasized by the tendency of the harpe in specimens of *comstocki* captured at Caripito to broaden at the end with the point more on the side than in specimens from Panama. Other characters of the genitalia, however, are identical with specimens from Panama.

This species is named in honor of William Comstock, Research Associate of the Department of Entomology at the American Museum of Natural History.

Material: A total of four specimens taken as follows: Caripito, Venezuela, May 16, 1 holotype ♂ (Cat. No. 42482); May 14 1 ♂ paratype (Cat. No. 42483); May 19, 2 ♂ paratypes (Cat. Nos. 42484 and 42485). In addition, five specimens from Panama at the American Museum of Natural History which I designate as paratypes. Another specimen from Aroa, Venezuela, is apparently the same species. (Text-figs. 1 and 2).

#### *Syssphinx flavosignata caripitoensis*, new subspecies.

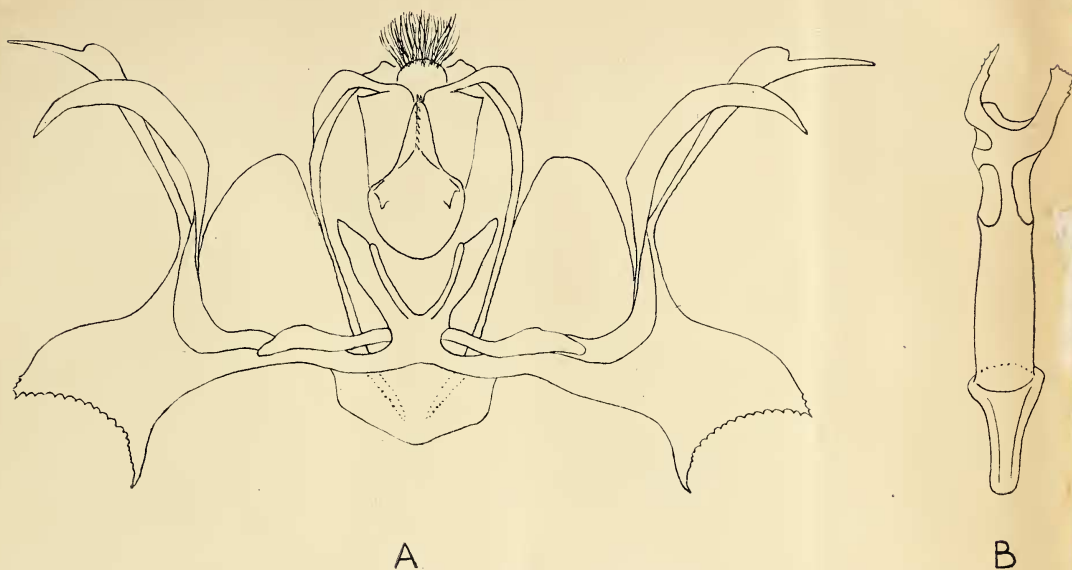
(Pl. I, Fig. 4; Text-figs. 2C, D).

The wing shape is similar to *S. f. flavosignata*, but the wings are reduced in size. Both specimens of *S. f. caripitoensis* have a wing length of 31 mm. rather than the 38 to 41 mm. of the nomenclatural type.

The head and ventral part of the thorax are light yellowish-orange. The legs are light purple with variable amounts of yellowish-orange. The anterior part of the prothorax and the patagia are light purple.

The appearance of the wings is similar to *flavosignata*. The median band of the fore

<sup>2</sup> Of McDonough: On the Nomenclature of the Male Genitalia in Lepidoptera. *Canad. Ent.*, Vol. XLIII, p. 188, 1911.



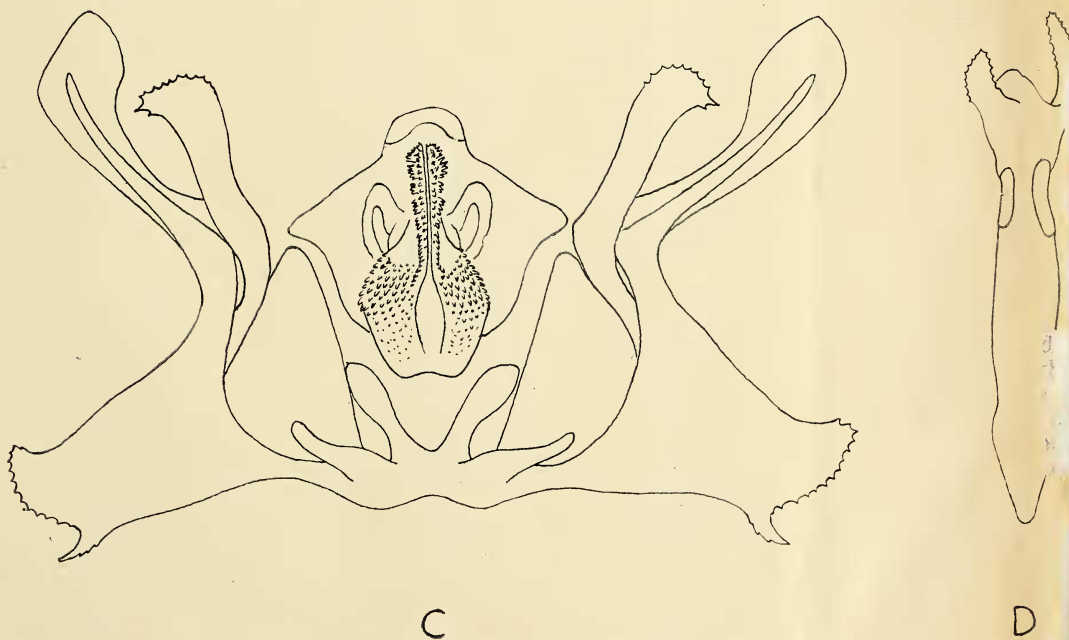
TEXT-FIG. 1. **A**, *Syssphinx comstocki*. Paratype: Cat. No. 42485. Caudal view of the ♂ genital organs with the claspers spread and aedeagus omitted. The uncus has been bent downward. **B**, aedeagus.

wing is orange-yellow flecked with purplish-brown scales. There are two silver spots near the discal cell in cells  $Cu_1$  and  $M_3$ . The terminal band is grayed lavender and encloses an almost immaculate light yellow band extending from vein  $M_3$  to the inner margin.

The basal and median areas of the hind

wing are light orange-yellow with a fuscous streak in the anal fold. The terminal band is light cream and is separated from the rest of the wing by an indistinct brown line.

The abdomen is light yellowish-orange with light fuscus in the conjunctivae. The genitalia are similar to *flavosignata*.



TEXT-FIG. 2. **C**, *Syssphinx flavosignata caripitoensis*. Paratype: Cat. No. 42481. **D**, aedeagus.

This subspecies is easily separated from *flavosignata* by its smaller size and much lighter color. The basal and median areas of the hind wing in particular are so light that they do not contrast with the outer portion of the wing as in *flavosignata* in which these portions of the wing stand out from one another very strongly. Furthermore, the purple colors of *caripitoensis* are very light, a grayish-lilac rather than the brownish-lilac usually present in *flavosignata*. Lastly, in the fore wing vein  $A_2$  is not clothed with purple scales in the yellow basal area as is usually the case in *flavosignata*.

Material: A total of two specimens taken as follows: Caripito, Venezuela: May 19, 1 ♂ holotype (Cat. No. 42480); May 14, 1 ♂ paratype (Cat. No. 42481).

***Syssphinx klagesi* (Rothschild).**

One specimen taken at Caripito on May 10. Another new record for Venezuela. It has been reported from British Guiana and Surinam.

***Syssphinx lilacina photophila* (Rothschild).**

Two specimens captured at Kartabo, one on April 1 and the other on June 20. The species has been found in the Guianas, Amazonas and Peru.

***Syssphinx molina molina* (Cramer).**

A common syssphingid at Caripito. A total of eleven specimens captured as follows: males—May 5, May 14 (2), May 16, May 25, June 14, August 21; females—May 19 (2), May 23 and July 3. This species has been found at Trinidad but has not before been reported from Venezuela. It has been captured in the Guianas, Brazil and Argentina. The subspecies *simulatis* (Grote and Robinson) is found from Mexico to Colombia.

***Syssphinx subochreatea* Schaus.**

One specimen taken at Caripito on May 10 and another on May 14. Reported only from Colombia. Another new record from Venezuela.

**EXPLANATION OF THE PLATE.**

**PLATE I.**

- Fig. 1. *Rhescyntis beebei*. Holotype: Cat. No. 42486.  
 Fig. 2. *Citheronia phoronea minutus*. Holotype: Cat. No. 42473.  
 Fig. 3. *Syssphinx flavosignata caripitoensis*. Holotype: Cat. No. 42480.  
 Fig. 4. *Syssphinx comstocki*. Holotype: Cat. No. 42482.





FIG. 1.



FIG. 2.



FIG. 3.



FIG. 4.

THE SATURNIOIDEA (MOTHS) OF KARTABO, BRITISH GUIANA,  
AND CARIPITO, VENEZUELA.